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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/824,277	04/14/2004	Marvin Ruffin	04263334	6201
7590	11/16/2005		EXAMINER SHALLENBERGER, JULIE ANN	
Wayne L. Tang MAYER, BROWN, ROWE & MAW LLP P.O. Box 2828 Chicago, IL 60690-2828			ART UNIT 2875	PAPER NUMBER

DATE MAILED: 11/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/824,277

Applicant(s)

RUFFIN, MARVIN

Examiner

Julie A. Shallenberger

Art Unit

2875

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) ____ is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 15-28 is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4/14/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Objections

Claim 1 is objected to because of the following informalities:

The second "an" online 4 should be -a-.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1 and 14 are rejected under 35 U.S.C. 102(a) as being unpatentable over Bourn (6,290,382).

In regard to claim 1, Bourn teaches multiple light emitting diodes 1041 supported by mounting bracket 1040 which are focused on an optic fiber 1022 which is supported by vertical arm 1013 that is attached to support bracket 1010.

In regard to claim 14, Bourn teaches multiple LEDs arranged symmetrically in relation to the optic fiber in figure 12.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2, 3, 5, 6, 12, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bourn in view of Sommers (6,796,698).

In regard to claims 2, 3, 5, and 6 Bourn teaches all the elements of independent claim 1, but lacks the teaching of a conical reflector or a heat sink with vanes coupled to the LED. Sommers teaches a reflector 22 with a conical body having a heat sink 44 on the end opposite from the open portion. Sommers also teaches a heat sink attached to the conical reflector, with vanes 48 on the opposite side, and the heat sink is thermally coupled to the LED.

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Bourn's lighting device with Sommers' light fixture comprising a reflector, and heat sink in order to maximize the amount of light emitted by the lighting device.

In regard to claims 12 and 13, Sommers teaches red, yellow, and green LEDs as well as a combination of the three producing white light.

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Bourn's lighting device with Sommers' teaching of multiple colored LED's in order to offer a variety of colors emitted by the light fixture.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bourn in view of Sommers and further in view of Takase (5,276,600).

In regard to claim 4, Bourn and Sommers teach all the elements of independent claim 1 as well as claims 2 and 3 but they lack the teaching of a metallic coating. Takase teaches the use of an aluminum high reflectance metal layer 4' on the interior surface of reflector 1.

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Bourn's lighting device with Sommers' LED fixture and Takase's aluminum coating in order to maximize the amount of light emitted.

Claims 7, 9, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bourn in view of Sommers, and further in view of Keplinger (5,345,531).

In regard to claims 7, 9, and 10, Bourn teaches all the elements of independent claim 1, but lacks the teaching of translucent and black cladding material around the optic fiber. Keplinger teaches an optical fiber with core material 13 and cladding material 18. Keplinger also teaches (in column 3 lines 53-54) the outer jacket 18 can be colored as claimed in 9 or it can be clear (column 3 line 43) as claimed in 10.

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Bourn's lighting device and Sommers' LED fixture with Keplinger's optical fiber, coating material, and jacket in order to maximize the amount of light emitted by the lighting device.

Claims 8 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bourn in view of Keplinger, and further in view of Prescott (4,964,692).

In regard to claims 8 and 11, Bourn and Keplinger teach the elements claimed in independent claim 1 as well as claim 7, but they lack the teaching of a cladding material that causes total reflection as claimed in 8. Prescott teaches (in column 2 lines 7-12) the use of a clad layer with low reflective index in order to subject the core to total reflection as claimed in 8. Prescott also teaches an optic fiber that can be bent into any shape (in column 6 lines 4-7) as claimed in 11.

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Bourn's lighting device with Keplinger's cladding and Prescott's clad layer (for total reflectivity) and the bendable shape for flexibility in mounting and usability of the fiber optic lighting device.

Allowable Subject Matter

Claims 15- 28 are allowed.

The following is a statement of reasons for the indication of allowable subject matter:

The prior art fails to show or teach a light emitting diode reflector assembly attached to multiple collars facing the receiving end of an optic fiber.

Conclusion


The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Libin (6,120,164) discloses as adjustable multiple lamp lighting device for focusing light.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julie A. Shallenberger whose telephone number is (571)272-7131. The examiner can normally be reached on Monday - Friday 830-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Renee Luebke can be reached on 571-272-2009. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Julie Shallenberger
Examiner
AU 2875



RENEE LUEBKE
PRIMARY EXAMINER